

*epi*TRENDS

A Monthly Bulletin
on Epidemiology
& Public Health
Practice in
Washington State

Vol. 3 No. 1

In This Issue:

Updates on Flu
in Washington
and Hong Kong
Page 4

Monthly
Surveillance Data
Page 3

Calendar
Page 4

WWW Access Tips
Page 4

Cardiovascular Disease: So Common, So Preventable; Reducing Risk Factors Is Key to Lowering Death Rate

As we recover from the excesses of the holiday season, the new year is the time when we make promises to take better care of ourselves. Recent analyses of data from the Washington State Behavioral Risk Factor Surveillance System (BRFSS) suggest that many Washingtonians could benefit from a 1998 resolution to eliminate modifiable risk factors for heart disease and stroke.

Cardiovascular disease (CVD) is the number one fatal disease in Washington State and accounted for 39% of all deaths in 1996. Coronary heart disease and strokes, the most common forms of CVD, can be largely prevented through control of risk factors. The major modifiable risk factors are physical inactivity, tobacco use, high

blood pressure, high blood cholesterol, and poor nutrition. Diabetes and being overweight, two other risk factors for CVD, are given attention because, along with hypertension and high blood cholesterol, they comprise the "deadly quartet" of causes of metabolic cardiovascular syndrome.

The probability of onset or exacerbation of existing heart disease or conditions leading to stroke increases dramatically with the number of risk factors present. Because many become more prevalent with increasing age, the Department of Health examined risk factors among Washington residents who were 45 years of age and older.

The BRFSS is a population-based, random-digit-dialed telephone survey of
Continued page 2

Hong Kong Avian Flu Prompts Expanded Influenza Surveillance

Although evidence indicates low likelihood of person-to-person transmission of the avian flu detected in Hong Kong, influenza A (H5N1), the Centers for Disease Control and Prevention recommends expanding current influenza surveillance activities.

The Department of Health (DOH) proposes the following to enhance Washington's sentinel physician influenza surveillance: (1) Physicians now participating in sentinel surveillance activities should obtain viral cultures for patients with severe primary viral pneumonia, acute respiratory distress syndrome (ARDS) without known cause, or influenza-like illness (fever $\geq 100^{\circ}\text{F}$ and cough or sore throat) **and** a history of travel to Hong Kong within 10 days before onset of symptoms. (2) Physicians who serve populations at heightened risk (e.g., in travel clinics or refugee clinics) should consider obtaining viral cultures for severely ill patients with presumed primary viral pneumonia, ARDS, or influenza-like illness **and** a history of travel to Hong Kong within the previous 10 days. (3) Finally, physicians attending patients hospitalized for primary viral pneumonia, ARDS, or influenza-like illness **and** who traveled to Hong Kong within 10 days prior to symptom onset should consider testing for influenza type A by viral culture or antigen-detection methods.

To the extent resources allow, the Public Health Laboratories will process these additional influenza samples. To report cases or for information about participating in the enhanced surveillance activity, contact the DOH influenza surveillance coordinator, Phyllis Shoemaker, at 206-361-2830 or by e-mail at pcs0303@hub.doh.wa.gov.

89%

Cardiovascular (from page 1)

the noninstitutionalized U.S. population aged 18 years and older. In 1995, respondents were asked their weight and height, whether they were current smokers, and whether they had ever been told by a health professional that they had high blood pressure, diabetes, or high blood cholesterol. (Data on physical inactivity were not collected in the 1995 BRFSS.)

Statewide Findings

In 1995, complete data were available for 1352 (92%) of 1471 respondents aged 45 years and older residing in Washington State. Respondents with incomplete data were excluded from the final analysis. Prevalence of the individual risk factors ranged from 5.6% ($\pm 1.3\%$) for diabetes to 39.1% ($\pm 3\%$) for high blood cholesterol

(Table 1). Because presence of risk factors was based on self-report, it is likely that some risk factors were underreported.*

Prevalence of individual risk factors differed significantly by gender only for high blood cholesterol, with more men reporting high levels. Seventy-two percent of respondents had at least one risk factor for cardiovascular disease; 36% had more than one (Table 2). Number of risk factors did not differ by gender; however, respondents with less education (high school graduates or less) were more likely to have two or more risk factors for heart disease than were college graduates. Although the overall prevalence for diabetes is low, persons with diabetes were more likely to have three or more risk factors (64.3% $\pm 11.3\%$) than was the general population.

The stroke death rate has not declined significantly in Washington State over the past five years and heart disease death rates reached a plateau in the 1990s. The 1995 BRFSS analysis suggests that many Washington residents aged 45 and older have modifiable risk factors for CVD and indicates the need for increased efforts in risk reduction. Prevention strategies that provide comprehensive interventions and affect multiple risk factors should receive the highest priority. Activities that broaden public and private partnerships in risk factor prevention and control are desirable because they will expand what can be accomplished through public health efforts alone and will sustain improvements.

The Heart Health Program of the Washington State Department of Health funds eight community-based heart disease prevention projects covering 14 counties. Each project addresses different populations and risk factors, uses a variety of interventions, and includes an assessment component. Examples of interventions are local "walking programs," peer education workshops to prevent teen smoking, and working with local media to increase public awareness of the relationship between proper nutrition and cardiovascular disease.

For information about the Heart Health Program or the community-based projects, call Karen Krueger at 360-753-4311.

For More Information

The Washington State Heart Disease and Stroke Prevention Plan (1995) is available from the Department of Health by calling 360-664-8578, or on-line at: <http://weber.u.washington.edu/~larsson/hsc94/resource/wahealth/heart1.htm>

Please see page 4 for information on other Web sites and an upcoming national conference on cardiovascular health.

TABLE 1: Percentage of respondents aged ≥ 45 years self-reporting five cardiovascular disease risk factors, by gender, Washington State Behavioral Risk Factor Surveillance System, 1995

Risk Factor	Percentage of Respondents (95% CI)		
	Male	Female	Total
Current smoking ¹	18.1 (± 3.3)	16.1 (± 2.6)	17.0 (± 2.1)
Hypertension ²	31.2 (± 4.1)	35.0 (± 3.6)	33.2 (± 2.7)
High blood cholesterol ³	41.6 (± 4.7)	36.9 (± 3.9)	39.1 (± 3.0)
Overweight ⁴	31.0 (± 4.0)	30.3 (± 3.7)	30.6 (± 2.7)
Diabetes ⁵	5.1 (± 1.8)	6.1 (± 1.7)	5.6 (± 1.3)

¹Smoked 100 cigarettes in lifetime and smokes now

²Ever told by a health professional your blood pressure was high

³Ever told by a health professional your cholesterol level was high

⁴Body mass index (BMI) > 27.8 for men and > 27.3 for women

⁵Ever told by a health professional you have diabetes (excluding gestational)

TABLE 2: Percentage of respondents ≥ 45 years at four levels of cardiovascular disease risk factor* clustering by gender, Washington State Behavioral Risk Factor Surveillance System, 1995

Number of Risk Factors	Percentage of Respondents (95% CI)		
	Male	Female	Total
0	27.1 (± 3.8)	29.5 (± 3.5)	28.3 (± 2.6)
1	36.0 (± 4.2)	34.5 (± 3.7)	35.2 (± 2.8)
2	27.0 (± 4.0)	22.2 (± 3.2)	24.5 (± 2.6)
≥ 3	10.0 (± 2.5)	13.8 (± 3.0)	11.9 (± 2.0)

*See Table 1

*Bowlin, SJ, Morrill BD, Nafziger AN, et al: Validity of cardiovascular disease risk factors assessed by telephone survey: The Behavioral Risk Factor Survey. *J Clin Epidemiol* 1993; 46:561-571.

Monthly Surveillance Data by County

December 1997* – Washington State Department of Health

County	E. coli O157:H7	Salmonella	Shigella	Hepatitis A	Hepatitis B	Non-A, Non-B Hepatitis	Meningococcal Disease	Pertussis	Tuberculosis	Chlamydia	Gonorrhea	AIDS	Pesticides†	Lead\$#
Adams	0	0	0	0	0	0	0	0	0	3	0	0	0	0/#
Asotin	0	0	0	0	0	0	0	0	0	7	0	0	0	0/0
Benton	0	0	0	0	0	0	0	0	1	15	2	0	0	0/29
Chelan	0	4	0	1	0	0	1	0	0	7	0	0	1	12/45
Clallam	0	3	0	0	1	0	0	0	0	6	0	0	0	0/0
Clark	0	2	2	0	0	0	0	2	2	47	0	3	0	0/0
Columbia	0	1	0	0	0	0	0	0	0	0	0	0	0	0/0
Cowlitz	0	0	0	0	3	0	1	0	0	19	0	0	0	0/13
Douglas	0	0	1	0	0	0	0	0	0	4	1	0	0	0/0
Ferry	0	0	0	0	0	0	0	0	0	1	0	0	0	0/0
Franklin	0	0	0	0	0	0	0	0	0	18	0	0	0	0/#
Garfield	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Grant	0	0	0	2	0	0	0	0	0	20	0	0	1	0/9
Grays Harbor	0	1	0	0	1	0	0	0	0	10	0	0	0	2/#
Island	0	0	0	0	0	0	0	0	0	5	0	0	0	0/#
Jefferson	0	0	0	0	0	1	0	0	0	0	0	0	0	0/#
King	9	29	8	99	0	0	3	20	8	334	93	20	5	3/31
Kitsap	0	3	1	0	0	0	0	2	0	54	14	1	0	0/21
Kittitas	0	0	0	0	0	0	0	0	0	4	0	0	0	0/#
Klickitat	0	0	1	0	0	0	0	0	0	3	0	0	0	0/#
Lewis	0	0	0	0	0	0	0	0	0	5	1	0	1	0/0
Lincoln	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Mason	0	0	1	0	1	0	0	1	0	4	1	2	0	0/0
Okanogan	0	0	0	0	0	0	0	0	1	6	0	1	0	0/#
Pacific	1	0	0	0	0	0	0	0	0	3	0	0	0	0/#
Pend Oreille	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Pierce	0	10	0	2	1	0	2	6	6	173	48	9	1	1/104
San Juan	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Skagit	0	1	1	2	0	1	0	1	0	13	1	0	0	0/0
Skamania	0	0	0	0	0	0	0	0	0	3	0	0	0	0/0
Snohomish	1	6	0	4	2	4	2	3	6	78	6	6	1	0/9
Spokane	1	5	0	50	0	0	0	1	3	46	11	0	0	1/28
Stevens	0	0	0	0	0	0	0	0	0	2	1	0	0	0/0
Thurston	0	2	2	3	0	1	0	5	0	17	1	1	1	0/5
Wahkiakum	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Walla Walla	1	2	0	1	0	0	0	0	0	1	0	2	0	0/7
Whatcom	0	0	1	0	0	0	0	2	0	36	1	1	1	0/#
Whitman	0	1	0	1	0	0	0	0	0	9	1	0	0	0/0
Yakima	1	9	24	11	0	0	2	3	1	60	1	0	1	0/25
Unknown														0/0

Current Month	14	79	42	176	9	7	11	46	28	1013	183	46	13	19/347
December 1996	36	184	79	310	61	16	24	170	28	576	115	96	9	11/421
1997 to date	135	643	292	782	82	33	96	416	305	9523	1956	620	377	186/4434
1996 to date	187	734	333	1001	158	66	116	830	285	9237	2020	737	405	183/5421

* Data are provisional based on reports received as of December 31, unless otherwise noted.

† Unconfirmed reports of illness associated with pesticide exposure.

\$# Number of elevated tests (data include unconfirmed reports) / total tests performed (not number of children tested); number of tests per county indicates county of health care provider, not county of residence for children tested; # means fewer than 5 tests performed, number omitted for confidentiality reasons.

** Data are not available for November.



WWW Access Tips

Two excellent Web sites with information on cardiovascular disease are: American Heart Association at <http://www.amhrt.org> and National Heart, Lung, and Blood Institute (NHLBI) at <http://www.nih.gov> (select Institutes and then the NHLBI).

Questions? Comments?

If you have a question about epidemiologic or public health issues, contact the editors at the address on the mailing panel or by email at function@u.washington.edu

Influenza Updates: Hong Kong Avian Flu Appears Under Control; Washington Influenza Season Off to Slow Start

By mid-January health officials in Hong Kong had confirmed 18 cases of the H5N1 strain of influenza A; six patients died. This avian flu had not previously been detected in humans, and unlike typical influenza strains, does not seem to transmit from person-to-person. Control measures in Hong Kong involved the slaughter of 1.5 million fowl. According to the World Health Organization, no travel restrictions or quarantine are needed.

Midway into the 1997-98 flu season in the United States, Washington has seen little flu activity. Nationally, 56% of isolates are A/Wuhan/359/95-like (included in the current vaccines) and 43% are A/Sydney/05/97-like. The latter is related but antigenically distinguishable; protection from available vaccines may be suboptimal. For outbreaks in closed settings, recommendations include reducing contact between symptomatic and asymptomatic persons and considering chemoprophylaxis with antiviral drugs for those who are not ill.

Conferences, Courses & Meetings

January 30 *Ambulatory/Outpatient Data Collection Feasibility Study* — Final round of technical issue meetings will be held from 9 am to noon on the dates indicated. For further information on meeting topics and the location, contact Hank Brown at 360-705-6000.

February 19-21 *Cardiovascular Health: Coming Together for the 21st Century* — A national conference sponsored by the National Heart, Lung and Blood Institute, CORE Program, University of California-San Francisco, and the California Cardiovascular Disease Prevention Coalition. For further information, call 415-476-5808. The Washington State Department of Health Heart Health Program will cosponsor the satellite broadcast of the February 19 opening sessions from 8 am to noon at sites in Seattle, Olympia, Mt. Vernon, Pasco, Spokane, and Yakima. There is no registration fee. For information and to register, call 360-664-8578 or 360-753-4311.

Seattle *Rabies Prevention and Control Workshops* — DOH conducts these workshops for local public health personnel, veterinarians, animal control officers, wildlife rehabilitators, and other interested persons. The morning session is a review of human and animal rabies cases and covers epidemiology, vaccination recommendations, and animal testing. The afternoon is a discussion session focused on rabies prevention. For more information, contact John Grendon at 360-586-5379 or jhg0303@hub.doh.wa.gov.

BULK RATE
U.S. Postage
PAID
Washington State
Dept. of Printing

epiTRENDS
P.O. Box 47812
Olympia, WA 98504-7812



epiTRENDS is published monthly by the Washington State Department of Health.
Bruce Miyahara, MHA
Secretary
Mimi L. Fields, MD, MPH
Deputy Secretary and
State Health Officer
Paul Stehr-Green, DrPH, MPH
State Epidemiologist
Sandra L. Marvimey, BA
Managing Editor
Marcia J. Goldoft, MD, MPH
Scientific Editor
epiTRENDS is posted on the
Department of Health web site
at: www.doh.wa.gov